Amendments to the Claims:

1. (Presently Amended) A body of a vehicle for hauling material having a front wall, a pair of sidewalls and a rear edge, the body made by the following process:

~~(a) determining an anticipated point of use for the vehicle;~~

(a~~b~~) determining heaping characteristics of material to be hauled at the vehicle's anticipated point of use, including at least angles of repose in three dimensions; ~~collecting data from the anticipated point of use including information regarding the shape of an actual load carried in an existing vehicle body as it extends upwards to the actual load top from at least two of a group consisting of (1) the body front wall, (2) one of the two body sidewalls and (3) the other of the two body sidewalls~~;

~~(c) determining a desired location for a load center of gravity on a chassis of the vehicle;~~

~~(d) determining a desired volumetric capacity for the body;~~

~~(e) establishing an initial line for a floor of the body, an initial line for the front wall of the body and an initial inside body width;~~

(b~~f~~) developing a three dimensional ~~volumetric~~ model of a load to be carried in the body on the chassis ~~defined by the initial floor line, the initial front wall line and the initial inside body width~~ using the angles of repose ~~data collected from the anticipated point of use with the three dimensional volumetric model having a volume and a volumetric model center of gravity located on the chassis~~;

(c~~g~~) adjusting a set of design parameters of the body until a ~~the load model~~ center of gravity of the model is located proximate a ~~the~~ desired location for a ~~the~~ load center of gravity on the chassis ~~from step (c)~~ and a ~~the~~ volume of the three dimensional ~~volumetric~~ model is substantially similar to a ~~the~~ desired volumetric capacity ~~from step (d)~~; and

(d~~h~~) producing the body in accordance with the set of design parameters.

2. (Presently Amended) The ~~invention~~ process according to claim 1 wherein the set of design parameters of the body includes a position of the body floor and a position of the body sidewalls.

3. (Presently Amended) The ~~invention~~ process according to claim 2 wherein the position of the body floor includes a length of the floor.

4. (Presently Amended) The ~~invention~~ process according to claim 2 wherein the position of the body sidewalls includes a height of the sidewalls.

5. (Presently Amended) The ~~invention~~ process according to claim 4 wherein the position of the body sidewalls further includes a distance between the respective sidewalls.

6. (Presently Amended) The ~~invention~~ process according to claim 2 wherein the set of design parameters of the body further includes a position of the body front wall.

7. (Presently Amended) The ~~invention~~ process according to claim 4 further including the step of adjusting a ~~the~~ length of the body floor and the height of the body sidewalls to provide the lowest practical vertical location for the center of gravity of the three dimensional volumetric model of the hauled material.

8. (Presently canceled)

9. (Presently Amended) The ~~invention~~ process according to claim 1 ~~8~~ wherein the angles of material repose include a front angle of material repose, a rear angle of material repose and side angles of the material repose.

10. (Presently Amended) The ~~invention~~ process according to claim 9 wherein the heaping characteristics of material to be hauled at ~~data collected from~~ the anticipated point of use further includes a representation of an actual load ~~carried in an existing vehicle body~~.

11. (Presently Amended) The ~~invention~~ process according to claim 10 wherein the heaping characteristics of material to be hauled at ~~data collected from~~ the anticipated point of use includes angles of material repose and representations of corner voids present in the corners of ~~existing~~ load-carrying vehicle bodies.

12. (Presently Amended) The ~~invention~~ process according to claim 1 wherein the heaping characteristics of material to be hauled at ~~data collected from~~ the anticipated point of use further includes a density of the ~~load~~ material.

13. (Presently Amended) The ~~invention~~ process according to claim 1 wherein the heaping characteristics of material to be hauled at ~~data collected from~~ the anticipated point of use accounts for ~~includes~~ a method used for loading material into the ~~an existing~~ vehicle body.

14. (Presently Amended) The ~~invention~~ process according to claim 10 wherein ~~the step of~~ developing the three dimensional ~~volumetric~~ model of a load to be carried in the body includes developing the three dimensional ~~volumetric~~ load model to account for corner voids in the vehicle body.

15. (Presently Amended) The ~~invention~~ process according to claim 14 wherein the three dimensional ~~volumetric load~~ model is developed through a gradual incremental blending of the respective side angles of material repose to the front angle of material repose and a gradual incremental blending of the respective side angles of material repose to the rear angle of material repose.

16. (Presently Amended) The ~~invention~~ process according to claim 14 further including ~~the step of~~ comparing the three dimensional ~~volumetric~~ load model with the representation of the actual load information ~~collected at the anticipated point of use~~ and adjusting the three dimensional ~~volumetric~~ load model as necessary such that the three dimensional ~~volumetric~~ load model substantially compares with the heaping characteristics of material to be hauled ~~representation of the actual load information collected~~ at the anticipated point of use.

17. (Presently Amended) The ~~invention~~ process according to claim 15 wherein the incremental blending of the side angles of material repose to the front and rear angles of material repose includes dividing the respective rounded corners of the three-dimensional ~~volumetric~~ model into equal segments, establishing a plane in each of these segments at a respective angle which allows an incremental change in the angles of material repose and extending the planes until they intersect the perimeter of the body.

18. (Presently Amended) The ~~invention~~ process according to claim 1 wherein ~~the step of~~ developing the three dimensional ~~volumetric~~ model of a load to be carried in the body includes modeling corner voids of the hauled material into the three dimensional ~~volumetric~~ load model.

19. (Presently Amended) The ~~invention~~ process according to claim 1 further including ~~the step of~~ adjusting the set of design parameters to provide the lowest practical vertical location for the center of gravity of the three dimensional model of the hauled material.

20. (Presently Amended) The ~~invention~~ process according to claim 1 further including ~~the step of~~ adjusting the set of design parameters to allow material to be loaded into the ~~dump~~ body from the lowest practical vertical location.

21. (Presently Amended) A body of a vehicle for hauling material having a front wall, a pair of sidewalls and a rear edge, the body made by the following process:

~~(a) determining a desired location for a load center of gravity on a chassis of the haulage vehicle;~~

~~(b) determining a desired volumetric capacity for the body;~~

~~(c) establishing an initial line for a floor of the body, an initial line for the front wall of the body and an initial inside body width;~~

(~~d~~ a) developing a three-dimensional ~~volumetric~~ model of a load to be carried in the body on the chassis ~~defined by the initial floor line, the initial front wall line and the initial inside body width using data collected from an anticipated point of use~~, where the model incorporates ~~including information from which at least two~~ angles of material repose ~~of~~ in three dimensions for an actual load ~~carried in an existing vehicle body~~ at an anticipated point of use ~~can be determined, the two angles of material repose being selected from a group consisting of (1) a front angle of material repose of the actual load as the actual load extends from the front wall of the body to a load top, (2) one of two side angles of material repose as the actual load extends from a respective one of sidewalls of the body to the load top and (3) the other of the two side angles of material repose as the actual load extends from the other of the sidewalls of the body to the load top~~;

(~~e~~ b) adjusting a set of design parameters of the body until the load model center of gravity is located proximate a ~~the~~ desired location for a ~~the~~ load center of gravity on a ~~the~~ chassis of the vehicle ~~from step (a)~~ and the volume of the three-dimensional ~~volumetric~~ model is substantially similar to a ~~the~~ desired volumetric capacity of the vehicle ~~from step (b)~~; and

(~~f~~ c) producing the body in accordance with the set of design parameters.

22. (Presently Amended) The ~~invention~~ process according to claim 21 wherein the set of design parameters of the body includes a position of the body floor and a position of the body sidewalls.

23. (Presently Amended) The ~~invention~~ process according to claim 22 wherein the position of the body floor includes a length of the floor.

24. (Presently Amended) The ~~invention~~ process according to claim 22 wherein the position of the body sidewalls includes a height of the sidewalls.

25. (Presently Amended) The ~~invention~~ process according to claim 24 wherein the position of the body sidewalls further includes a distance between the respective sidewalls.

26. (Presently Amended) The ~~invention~~ process according to claim 22 wherein the set of design parameters of the body further includes a position of the body front wall.

Claim 27 (Previously Cancelled)

28. (Presently Amended) The ~~invention~~ process according to claim 21 wherein the three-dimensional model ~~data collected from the anticipated point of use further~~ includes representations of the conical shape of an actual load ~~carried in an existing vehicle body~~.

29. (Presently Amended) The ~~invention~~ process according to claim 21 further including ~~the step of~~ adjusting the set of design parameters to provide the lowest practical vertical location for the center of gravity of the three dimensional model of the hauled material.

30. (Presently Amended) The ~~invention~~ process according to claim 21 further including ~~the step of~~ adjusting the set of design parameters to allow material to be loaded into the ~~dump~~ body from the lowest practical vertical location.

31. (Presently Amended) A body of a vehicle for hauling material, the body made by the following process:

~~(a) determining a desired location for a load center of gravity on a chassis of the haulage vehicle;~~

~~(b) determining a desired volumetric capacity for the body;~~

~~(c) establishing an initial line for a floor of the body, an initial line for a front wall of the body and an initial inside body width;~~

(~~d~~ a) developing a three dimensional ~~volumetric~~ model of a load to be carried in the body on the chassis, wherein the ~~defined by the initial floor line, the initial front wall line and the initial inside body width including developing a three-dimensional volumetric load~~ model ~~that~~ includes corner voids, ~~and~~ a truncated peak, ~~of the three-dimensional volumetric model, the three-dimensional volumetric model having~~ a volume and a ~~volumetric model~~ center of gravity and ~~located on the chassis~~ wherein the three-dimensional ~~volumetric~~ load model is developed through a gradual incremental blending of respective side angles of material repose to ~~a~~ front and rear angles of material repose ~~and a gradual incremental blending of the respective side angles of material repose to a rear angle of material repose~~ with the ~~front~~ angles of material repose being those of particular material to be hauled by the body ~~different than at least one of the side angles of material repose~~;

(~~e~~ b) adjusting a set of design parameters of the body until the load model center of gravity is located proximate a ~~the~~ desired location for a ~~the~~ load center of gravity on a ~~the~~ chassis of the vehicle ~~from step (a)~~ and the volume of the three dimensional ~~volumetric~~ model is substantially similar to a ~~the~~ desired volumetric capacity ~~from step (b)~~; and

(~~f~~ c) producing the body in accordance with the set of design parameters.

32. (Presently Amended) The ~~invention~~ process according to claim 31 wherein the set of design parameters of the body includes a position of the body floor and a position of the body sidewalls.

33. (Presently Amended) The ~~invention~~ process according to claim 32 wherein the position of the body floor includes a length of the floor.

34. (Presently Amended) The ~~invention~~ process according to claim 32 wherein the position of the body sidewalls includes a height of the sidewalls.

35. (Presently Amended) The ~~invention~~ process according to claim 34 wherein the position of the body sidewalls further includes a distance between the respective sidewalls.

36. (Presently Amended) The ~~invention~~ process according to claim 32 wherein the set of design parameters of the body further includes a position of the body front wall.

Claim 37 (Presently Canceled)

38. (Presently Amended) The ~~invention~~ process according to claim 31 wherein the incremental blending of the side angles of material repose to the front and rear angles of material repose includes dividing the ~~respective corners of the~~ three-dimensional ~~volumetric~~ model into ~~equal~~ segments, establishing a plane in each of these segments at a respective angle which allows ~~an incremental~~ change in the angles of material repose through the front, sides and rear of the three dimensional model and extending the planes until they intersect the perimeter of the body.

Claims 39-51 (Previously Cancelled)

52. (Presently Amended) A body of a vehicle for hauling material having a front wall, a pair of sidewalls and a rear edge, the body made by the following process:

~~(a) determining a representative point of use for the vehicle;~~

~~(b) collecting data from the representative point of use;~~

~~(c) determining a desired location for a load center of gravity on a chassis of the vehicle;~~

~~(d) determining a desired volumetric capacity for the body;~~

(e a) ~~establishing an initial line for a floor of the body, an initial line for a front wall of the body and an initial inside body width~~ collecting information describing a three-dimensional shape of a heaped load of material at an anticipated point of use for the body;

(~~f~~ b) developing from the collected information a three-dimensional volumetric model of a load to be carried in the body on the chassis ~~defined by the initial floor line, the initial front wall line and the initial inside body width using the data collected from the representative point of use with the three-dimensional volumetric model having a volume and a volumetric model center of gravity located on the chassis, the collected data information regarding the shape of an actual load carried in an existing vehicle body as it extends upwards to the actual load top from at least two of a group consisting of (1) the body front wall, (2) one of the two body sidewalls and (3) the other of the two body sidewalls~~;

(~~g~~ c) adjusting a set of design parameters of the body until the load model center of gravity is located proximate a ~~the~~ desired location for a ~~the~~ load center of gravity on a ~~the~~ chassis of the vehicle ~~from step (c)~~ and the volume of the three-dimensional volumetric model is substantially similar to a ~~the~~ desired volumetric capacity of the vehicle ~~from step (d)~~; and

(~~h~~ d) producing the body in accordance with the set of design parameters.

53. (Presently Amended) The ~~invention~~ process according to claim 52 wherein the set of design parameters of the body includes a position of the body floor and a position of body sidewalls.

54. (Presently Amended) The ~~invention~~ process according to claim 52 wherein the information ~~data~~ collected from the anticipated ~~representative~~ point of use includes angles of material repose of an actual load ~~carried in an existing vehicle body~~.

55. (Presently Amended) The ~~invention~~ process according to claim 52 wherein the information ~~data~~ collected ~~from the representative point of use further~~ includes a density of the load material.

56. (Presently Amended) The ~~invention~~ process according to claim 52 wherein the ~~data~~ collected information accounts for ~~from the anticipated point of use includes~~ a method used for loading material into a ~~an existing~~ vehicle body.

57. (Presently Amended) The ~~invention~~ process according to claim 52 wherein ~~the step of~~ developing the three-dimensional ~~volumetric~~ model of a load to be carried in the body includes developing a generally rounded-off conical three-dimensional ~~volumetric~~ load model.

58. (Presently Amended) The ~~invention~~ process according to claim 52 further including ~~the step of~~ adjusting the set of design parameters to provide the lowest practical vertical location for the center of gravity of the three dimensional model of the hauled material.

59. (Presently Amended) The ~~invention~~ process according to claim 52 further including ~~the step of~~ adjusting the set of design parameters to allow material to be loaded into the ~~dump~~ body from the lowest practical vertical location.

60. (Presently Amended) A body of a vehicle for hauling material ~~having a front wall, a pair of sidewalls and a rear edge, the body~~ made by the following process:

~~(a) determining an anticipated point of use for the vehicle;~~

~~(b) collecting data from the anticipated point of use;~~

~~(c) determining a desired volumetric capacity for the body;~~

~~(d) establishing an initial line for a floor of the body, an initial line for a front wall of the body and an initial inside body width;~~

(~~e~~ a) developing a three dimensional ~~volumetric~~ model of a load to be carried in the body from information describing heaping characteristics of material to be hauled at the vehicle's ~~defined by the initial floor line, the initial front wall line and the initial inside body width using the data collected from the~~ anticipated point of use ~~with the three dimensional volumetric model having a volume, the collected data including information regarding the shape of an actual load carried in an existing vehicle body as it extends upwards to the actual load top from at least two of a group consisting of (1) the body front wall, (2) one of the two body sidewalls and (3) the other of the two body sidewalls~~;

(~~f~~ b) adjusting a set of design parameters of the body until a ~~the~~ volume of the three dimensional ~~volumetric~~ model is substantially similar to a ~~the~~ desired volumetric capacity ~~from step (e)~~; and

(~~g~~ c) producing the body in accordance with the set of design parameters.

61. (Previously Presented) The process ~~body~~ of claim 60 where the set of design parameters includes one or more of (1) a position of the body's floor, (2) a position of the body's sidewalls (3) a length of the floor, (4) a height of sidewalls, (5) a distance between the respective sidewalls and (6) a position of the body front wall.

62. (Previously Presented) The process ~~body~~ of claim 60 including adjusting the set of design parameters to locate a center of gravity of material held in the modeled body at approximately a lowest possible position for the center of gravity.

63. (Previously Presented) The process ~~body~~ of claim 60 further including adjusting the set of design parameters to allow material to be loaded ~~dropped~~ into the modeled body from a lowest practical vertical elevation over a floor of the body.

64. (Presently Amended) A container for material of particular characteristics made by the following process:

(a) collecting data describing a three-dimensional shape of an actual heap of the material ~~having front, back and two sides~~, where the shape is affected by the particular characteristics of the material and the data includes ~~at least two~~ angles of repose for the heaped material ~~selected from a group of angles of repose consisting of (1) a front angle, (2) a back angle (3) a first side angle, and (4) a second side angle~~;

(b) determining a set of design parameters for the container from the collected data; and

(c) producing the container ~~body~~ in accordance with the set of design parameters.

65. (Presently Amended) The process ~~body~~ of claim 64 where the set of design parameters includes one or more of

(1) a position of the container's ~~body's~~ floor,

(2) a position of the container's ~~body's~~ sidewalls

(3) a length of the floor,

(4) a height of sidewalls,

(5) a distance between the respective sidewalls and

(6) a position of the container ~~body~~ front wall.

66. (Presently Amended) The process ~~body~~ of claim 64 including adjusting the set of design parameters to locate a center of gravity of material held in the container ~~modeled body~~ at approximately a lowest possible position for the center of gravity.

67. (Presently Amended) The process ~~body~~ of claim 64 further including adjusting the set of design parameters to allow material to be loaded ~~dropped~~ into the container ~~modeled body~~ from a lowest practical vertical elevation over a floor of the container ~~body~~.

68. (Presently Amended) A container for holding material made by the following process:

(a) modeling a three-dimensional load of heaped material carried in the container, where the load has front, back and opposing side angles representing angles of repose for the material, the modeling including (1) truncating a peak of the heap and (2) blending each of the side angles to the front and rear angles ~~by dividing corners of the three-dimensional load into segments and adjusting angles of the segments representing angles of material repose through the front, sides and rear of the three-dimensional load and extending the segments until they intersect a perimeter of the container~~;

(b) selecting a set of design parameters for the container that locates the center of gravity for the modeled load proximate a desired location and provides a volume of the modeled load that is substantially a desired volume; and

(c) producing the container in accordance with the set of design parameters.

69. (Presently Amended) The process ~~body~~ of claim 68 where a shape of the modeled load approximates a cone truncated at its top and along sides and a front that are in contact with sides and front of the container ~~body~~ being modeled.

70. (Presently Amended) The process ~~body~~ of claim 68 where the set of design parameters includes one or more of (1) a position of the container's ~~body's~~ floor, (2) a position of the container's ~~body's~~ sidewalls (3) a length of the floor, (4) a height of sidewalls, (5) a distance between the respective sidewalls and (6) a position of the container ~~body~~ front wall.

71. (Presently Amended) The process ~~body~~ of claim 68 including adjusting the set of design parameters to locate a center of gravity of material held in the container ~~modeled body~~ at approximately a lowest possible position for the center of gravity.

72. (Presently Amended) The process ~~body~~ of claim 68 further including adjusting the set of design parameters to allow material to be loaded ~~dropped~~ into the container ~~modeled body~~ from a lowest practical vertical elevation over a floor of the container ~~body~~.

73. (Presently Amended) A body of a haulage vehicle made by a process comprising:

(a) collecting data describing angles of repose of heaped material in three dimensions, where the data is from a working environment for the haulage vehicle and the material is a particular material whose characteristics affect the angles of repose;

(b) modeling a body to hold a load of the material such that a center of gravity of the load determined from the collected data is proximate a desired location~~, where the body's shape is defined by the collected data~~; and

(c) producing the body.

74. (Presently Amended) The process ~~body~~ of claim 73 wherein the collected data includes information regarding a shape of an actual load carried in an existing vehicle body.

75. (Presently Amended) The process ~~body~~ of claim 74 wherein the collected data includes information describing ~~two or more of~~ the heaped material's angles of repose ~~selected from a group consisting of (1) an angle taken~~ from ~~a~~ front, back and side walls of the body ~~(2) an angle taken from one of the two body sidewalls and (3) an angle taken the other of the two body sidewalls~~.

76. (Presently Amended) The process ~~invention~~ of claim 73 wherein the desired center of gravity is ~~modeling the body includes locating a center of gravity of the material held in the modeled body~~ at a location approximating a lowest possible position for the center of gravity.

77. (Presently Amended) The process ~~body~~ of claim 76 further including adjusting the height of sidewalls of the body to allow material to be loaded ~~dropped~~ into the modeled body from a lowest practical vertical elevation over a floor of the body.

78. (Presently Amended) A body of a haulage vehicle made by a process comprising:

(a) modeling a shape of a load of heaped material in three dimensions, where the shape is substantially conical and the modeling incorporates information about angles of repose for a particular heaped material to be hauled by the vehicle ~~material is a particular material whose characteristics affect angles of repose in three dimensions that comprise the shape of the heaped material~~;

(b) modeling a body to hold the substantially conically shaped load of the material, where a shape of the body is defined by predetermined parameters; and

(c) producing the body according to values of the predetermined parameters resulting from the modeling of the body.

79. (Presently Amended) The process ~~body~~ of claim 78 where the predetermined parameters include one or more of (1) a position of the body's floor, (2) a position of the body's sidewalls (3) a length of the floor, (4) a height of sidewalls, (5) a distance between the respective sidewalls and (6) a position of the body front wall.

80. (Presently Amended) The process ~~invention~~ of claim 78 including adjusting the predetermined parameters to locate ~~a location for~~ a center of gravity of material held in the modeled body that approximates a lowest possible location ~~position for the center of gravity~~.

81. (Previously Presented) The process ~~body~~ of claim 78 further including adjusting the predetermined parameters to allow material to be loaded ~~dropped~~ into the modeled body from a lowest practical vertical elevation over a floor of the body.

82. (New) A body of a haulage vehicle for hauling particular material, the body made by a process comprising:(a) collecting data describing heaping characteristics of the particular material in three dimensions; (b) modeling in three dimensions a heaped load of the material to be carried in a body of the haulage vehicle, where the heaped load includes angles of repose derived from the collected data; and (c) producing the body to hold the heaped load of the material such that when the body is mounted on the haulage vehicle and filled with an actual heaped load of the material the centroid of the actual heaped load is located proximate a predetermined location over a chassis of the haulage vehicle.

83. (New) The process of claim 82 above wherein the modeling of the heaped load in three dimensions includes modeling as a conical shape a section of the heaped load extending above the truck body, where the conical shape incorporates the angles of repose derived from the collected data.

84. (New) The process of claim 82 wherein the angles of repose result in an asymmetrical model of the heaped load.

85. (New) The process of claim 82 wherein the angles of repose result in a symmetrical model of the heaped load.

86. (New) The process of claim 82 wherein the collecting of data includes observing heaping characteristics of either (1) the particular material to be hauled or (2) different material having substantially the same heaping characteristics of the particular material.

87. (New) The process of claim 1 wherein developing a three dimensional model of a load includes adjusting a heaping height of the three dimensional model to reflect heaping characteristics of material to be hauled at the anticipated point of use for the vehicle.